

## **Claims**

We claim:

1. A method for providing a compact interface for display of an object hierarchy having a plurality of levels, comprising:

displaying a first level root node of the object hierarchy;

upon selection of the first level root node, displaying a listing of all second level child nodes of the first level root node immediately adjacent the first level root node; and

selecting one of the second level child nodes;

wherein, upon selection of one of the second level child nodes, the listing of all second level child nodes of the first level root node disappears, and the selected second level child node is displayed immediately adjacent the first level root node.

2. The method of claim 1, further comprising:

upon selection of the displayed second level child node, listing all third level child nodes of the displayed second level child node immediately adjacent the displayed second child node; and

selecting one of the third level child nodes;

wherein, upon selection of one of the third level child nodes, the window listing all third level child nodes of the displayed second level child node disappears, and the selected third level child node is displayed immediately adjacent the displayed second child node.

3. The method of claim 2, further comprising:

selectively repeating the above-described steps for at least one subsequent level in the object hierarchy, wherein each selected node is displayed immediately adjacent a selected node from a previous level of the object hierarchy.

4. The method of claim 3, wherein the first level root node and any selected nodes are displayed in a linear arrangement, wherein only a single node is displayed for each level of the object hierarchy.

5. The method of claim 4, further comprising, upon selection of one of the displayed nodes:

displaying a listing of all sibling nodes of the selected displayed node, and a listing of all child nodes of the selected displayed node adjacent the selected displayed node.

6. The method of claim 4, further comprising, upon selection of one of the displayed nodes:

displaying a listing of at least one level of ancestor nodes of the selected displayed node, a listing of all sibling nodes of the selected displayed node, and a listing of all child nodes of the selected displayed node.

7. The method of claim 4, further comprising, upon selection of one of the displayed nodes:

displaying a listing of each level of ancestor nodes of the selected displayed node, a listing of all sibling nodes of the selected displayed node, and a listing of each level of descendant nodes of the selected displayed node.

8. The method of claim 1, further comprising:

associating at least one of the displayed nodes with a functionality; and

upon selection of one of the displayed nodes, executing the functionality associated with the selected node.

9. A system for providing a compact interface for display of an object hierarchy having a plurality of levels, comprising:

a display system for displaying elements of the compact interface;

a system for selecting displayed elements of the compact interface; and

a system for updating the compact interface based of the elements selected by the selecting system;

wherein, upon selection of a displayed first level root node, a listing of all second level child nodes of the first level root node is displayed immediately adjacent the first level root node, and wherein, upon selection of one of the second level child nodes, the listing of all second level child nodes of the first level root node is no longer displayed, and the selected second level child node is displayed immediately adjacent the first level root node.

10. The system of claim 9, wherein, upon selection of the displayed second level child node, a listing of all third level child nodes of the second level child node is displayed immediately adjacent the second child node, and wherein, upon selection of one of the third level child nodes, the window listing all third level child nodes of the second level child node is no longer displayed, and the selected third level child node is displayed immediately adjacent the second child node.

11. The system of claim 10, wherein each selected node is displayed immediately adjacent a selected node from a previous level of the object hierarchy.

12. The system of claim 11, wherein the first level root node and any selected nodes are displayed in a linear arrangement, wherein only a single node is displayed for each level of the object hierarchy.

13. The system of claim 12, wherein, upon selection of one of the displayed nodes, a listing of all sibling nodes of the selected displayed node and a listing of all child nodes of the selected displayed node are displayed adjacent the selected displayed node.

14. The system of claim 12, wherein, upon selection of one of the displayed nodes, a listing of at least one level of ancestor nodes of the selected displayed node, a listing of all sibling nodes of the selected displayed node, and a listing of all child nodes of the selected displayed node are displayed adjacent the selected displayed node.

15. The system of claim 12, wherein, upon selection of one of the displayed nodes, a listing of each level of ancestor nodes of the selected displayed node, a listing of all sibling nodes of the selected displayed node, and a listing of each level of descendant nodes of the selected displayed node are displayed adjacent the selected displayed node.

16. A compact interface for displaying an object hierarchy having a plurality of levels, comprising:

a first level root node of the object hierarchy;

a single second level node of the object hierarchy, wherein the second level node is a child of the first level root node; and

a single third level node of the object hierarchy, wherein the third level node is a child of the second level node;

wherein the first level root node, second level node, and third level node are displayed in a linear arrangement, wherein the first level root node and second level node are live, and wherein the third level node is live if it has any child nodes.

17. The compact interface of claim 16, wherein, upon selection of a live node, a listing of all child nodes of the selected live node is displayed adjacent the selected live node.

18. The compact interface of claim 16, wherein, upon selection of a live node, a listing of all sibling nodes of the selected live node is displayed, and a listing of all child nodes of the selected live node is displayed adjacent the listing of all sibling nodes.

19. The compact interface of claim 16, wherein, upon selection of a live node, a listing of sibling nodes of the selected live node is displayed, a listing of all child nodes of the selected live node is displayed adjacent the listing of all sibling nodes, and a listing of at least one level of ancestor nodes of the selected live node is displayed adjacent the selected live node.

20. The compact interface of claim 16, wherein, upon selection of a live node, a listing of sibling nodes of the selected live node is displayed, a listing of each level of descendant nodes of the selected live node is displayed on a first side of the listing of sibling nodes, and a listing of each level of ancestor nodes of the selected live node is displayed on a second side of the selected live node.

21. A program product stored on a recordable medium for providing a compact interface for display of an object hierarchy having a plurality of levels, which when executed comprises:

program code for displaying a first level root node of the object hierarchy;

program code for displaying a listing of all second level child nodes of the first level root node immediately adjacent the first level root node, upon selection of the first level root node; and

program code for causing the listing of all second level child nodes of the first level root node to disappear upon selection of one of the second level child nodes, and for displaying the selected second level child node immediately adjacent the first level root node.

22. The program product of claim 21, further comprising:

program code for listing all third level child nodes of the displayed second level child node immediately adjacent the displayed second child node, upon selection of the displayed second level child node; and

program code for causing the window listing all third level child nodes of the displayed second level child node to disappear, upon selection of one of the third level child nodes, and for displaying the selected third level child node immediately adjacent the displayed second child node.



23. The program product of claim 22, further comprising:

program code for selectively repeating the above-described steps for at least one subsequent level in the object hierarchy, wherein each selected node is displayed immediately adjacent a selected node from a previous level of the object hierarchy.

24. The program product of claim 23, wherein the first level root node and any selected nodes are displayed in a linear arrangement, wherein only a single node is displayed for each level of the object hierarchy.

25. The program product of claim 24, further comprising, upon selection of one of the displayed nodes:

program code for displaying a listing of all sibling nodes of the selected displayed node, and a listing of all child nodes of the selected displayed node adjacent the selected displayed node.

26. The program product of claim 24, further comprising, upon selection of one of the displayed nodes:

program code for displaying a listing of at least one level of ancestor nodes of the selected displayed node, a listing of all sibling nodes of the selected displayed node, and a listing of all child nodes of the selected displayed node.

27. The program product of claim 24, further comprising, upon selection of one of the displayed nodes:

program code for displaying a listing of each level of ancestor nodes of the selected displayed node, a listing of all sibling nodes of the selected displayed node, and a listing of each level of descendant nodes of the selected displayed node.

28. The program product of claim 21, further comprising:

program code for associating at least one of the displayed nodes with a functionality; and

program code for executing the functionality associated with the selected node, upon selection of one of the displayed nodes.